E_p = Young's modulus of drilled shaft

I_p=moment inertia of drilled shaft

L=the length of drilled shaft

The point of rotation, normalized as a function of shaft-length (T_0/L), was estimated using the Equation 30 (Gabr et al 2002).

Equation 30
$$\frac{T_0}{L} = 1 + 0.18 \log K_R \quad (K_R \leq 1)$$

An empirical multiplier (I_T) below point of rotation can be obtained from Equation 31

Equation 31
$$I_T = -28 - 383 \log(\frac{T_0}{L}) \quad I_T \geq 1$$

Figure 119 (a through j) shows the P-y curves obtained using the procedure proposed by Gabr et al (2002). The variability in the shape and magnitude of the P-y curves with depth is attributed to the layered profiles and the associated properties as outlined in Table   38   and